

What is claimed is:

1. A lubricating oil for use in heavy duty diesel engines comprising an admixture of:
  - (A) a major amount of an oil of lubricating viscosity
  - (B) at least 4 mass % dispersant,
  - (C) at least 0.3 mass % of a metal phenate,
  - (D) less than 0.1 mass % friction modifier,
  - (E) less than 0.3 mass % of sulfurized phenols,
  - (F) less than 0.12% neutral calcium sulfonate.
2. The lubricating oil of claim 1 wherein the oil has a sulfated ash content of about 0.35 to about 2 mass %.
3. The lubricant of claim 1 further characterized by having no more than 0.2 mass % active ingredient of aromatic amines having at least two aromatic groups attached directly to the nitrogen.
4. The lubricant of claim 1 further comprising a boron containing additive in an amount that provides at least 100 ppm (mass) boron.
5. The lubricant of claim 4 wherein the boron-to-nitrogen mass ratio is at least 0.1.  
*Sub A1*
6. The lubricant of any of claims 1-5 wherein the lubricant further comprises Overbased metal sulfonate.
7. The lubricating oil of claim 6 wherein the metal sulfonate is magnesium sulfonate.
8. A concentrate comprising an admixture of:
  - (A) at least 32 mass % dispersant,
  - (B) at least 2.4 mass % of a metal phenate,
  - (C) less than 1.6 mass % friction modifier
  - (D) less than 1.96 mass % of sulfurized phenols,
  - (E) less than 0.94 mass % calcium sulfonate.

9. A heavy duty diesel lubricating oil comprising a major amount of an oil of lubricating viscosity and

- (A) at least 4 mass % dispersant,
- (B) at least 0.3 mass % of a metal phenate,
- (C) less than 0.1 mass % friction modifier,
- (D) less than 0.3 mass % of sulfurized phenols,
- (E) less than 0.12% neutral calcium sulfonate.

10. A concentrate comprising:

- (A) at least 32 mass % dispersant,
- (B) at least 2.4 mass % of a metal phenate,
- (C) less than 1.6 mass % friction modifier
- (D) less than 1.96 mass % of sulfurized phenols,
- (E) less than 0.94 mass % calcium sulfonate.

11. The lubricating oils of claims 1, 8, 9, or 10 further comprising (G) a metal dithiophosphate.

12. The lubricating oil of Claim 11 wherein at least 50 mole % of the hydrocarbyl groups on the metal dithiophosphate are secondary.

13. The lubricating oils of claims 1,8,9 or 10 comprising less than 0.3 mass % sulfurized ester.

14. A method for controlling corrosion in diesel engines comprising using the oil of claim 1.